



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

May 23, 2016

Louis A. Chiarella
Assistant Regional Administrator
Habitat Conservation Division
National Marine Fisheries Service
55 Great Republic Drive
Gloucester, MA 01930

Re: Reissuance of the NPDES Permit for the Pilgrim Nuclear Power Station,
Plymouth, Massachusetts, Permit No. MA0003557- Essential Fish Habitat
Correspondence

Dear Assistant Regional Administrator Chiarella:

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. §1801 et seq. (1998)), EPA is required to consult with the National Marine Fisheries Services (NOAA Fisheries) if EPA's action or proposed action that it funds, permits, or undertakes, may adversely impact any essential fish habitat (EFH). Adversely impact means any impact which reduces the quality and/or quantity of EFH (50 C.F.R. § 600.910 (a)). Adverse impacts may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat wide impacts, including individual, cumulative, or synergistic consequences of actions.

The Amendments broadly define essential fish habitat as: waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (16 U.S.C. §1802 (10)). This letter serves as EPA's notification to NOAA Fisheries of a proposed permit action that meets the criteria described above.

Essential fish habitat is only designated for species for which federal fisheries management plans exist (16 U.S.C. § 1855(b) (1) (A)). EFH designations for New England were approved by the U.S. Department of Commerce on March 3, 1999 and are identified on a NOAA Fisheries website (<http://www.nero.noaa.gov/hcd/webintro.html>). In some cases, a narrative identifies rivers and other waterways that should be considered EFH due to present or historic use by federally managed species.

Pilgrim Nuclear Power Station (PNPS, the permittee) is a 670 megawatt (MW) electric generating facility adjacent to Cape Cod Bay in Plymouth, MA. The facility discharges

wastewater from a combination of once-through cooling water, traveling screen washwater, treated process wastewaters, miscellaneous low volume wastewaters, and storm water.

PNPS, like all facilities that utilize a natural waterbody for cooling purposes, can impact aquatic resources primarily through the entrainment of small organisms (e.g., early life stages of fish and macroinvertebrates) into the cooling water system, impingement of larger organisms on the intake screens, and through the discharge of effluent to Cape Cod Bay. The impacts from each of these sources are discussed in detail in the Fact Sheet accompanying the Draft NPDES permit (Section 12, p. 66).

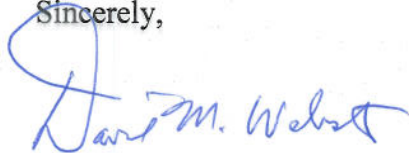
EPA believes that the conditions and limitations contained within the Draft Permit adequately protects all aquatic life, including those with designated EFH in the receiving water, for the following reasons.

- The Draft Permit includes limitations and conditions consistent with PNPS' announcement to close the facility within the next five years, including the requirement to eliminate cooling water intake flows for the main condenser which will reduce cooling water flows by 96% compared to existing flows.
- Based on the permit's post-shutdown cooling water needs, the actual through-screen velocity will typically be less than 0.5 fps, which EPA believes will allow most individuals to avoid impingement.
- Effluent is discharged into Cape Cod Bay, with rapid mixing characteristics from the high energy tidal exchange;
- The thermal plume from PNPS is relatively small compared to the receiving water and dissipates rapidly. Over 40 years of biological monitoring data demonstrate that the variance-based limits will assure the protection and propagation of a balanced, indigenous community of shellfish, fish and wildlife, which includes species with designated EFH;
- Following termination of electrical generation at PNPS, the facility will cease discharges of non-contact cooling water from the main condenser, which will drastically reduce the maximum effluent temperature and rise in temperature compared to the existing conditions.
- The Draft Permit limits pH, oil and grease, total residual oxidants, and total suspended solids to meet water quality standards;
- The Draft Permit prohibits the discharge of pollutants or combination of pollutants in toxic amounts;
- The effluent limitations and conditions in the Draft Permit were developed to be protective of all aquatic life; and
- The Draft Permit prohibits violations of the state water quality standards.

EPA believes that the conditions and limitations contained within the Draft Permit adequately protects species with designated EFH in Cape Cod Bay and that further mitigation is not warranted. If adverse impacts to EFH are detected as a result of this permit action, or if new information is received that changes the basis for EPA's conclusions, NOAA Fisheries will be contacted and an EFH consultation will be initiated.

A full justification to support EPA's finding is included in the Fact Sheet accompanying the Draft NPDES permit for PNPS, Permit No. MA0003557. The Fact Sheet and Draft Permit were placed on public notice on May 18, 2016, and are available for review at: https://www3.epa.gov/region1/npdes/draft_permits_listing_ma.html. As part of the renewal of the NPDES permit for this facility, EPA has made the Draft Permit and the Fact Sheet available to NMFS. The comment period is scheduled to close on July 18, 2016. Please Danielle Gaito of my staff at (617) 918-1297 with any questions related to this letter.

Sincerely,

A handwritten signature in blue ink, appearing to read "David M. Webster". The signature is fluid and cursive, with a large initial "D" and "W".

David M. Webster, Chief
Water Permits Branch
Office of Ecosystem Protection

ecc: Alison Verkade, NMFS

